

September 28, 2010

Jocelyn Boyd, Esquire Chief Clerk and Administrator South Carolina Public Service Commission Post Office Drawer 11649 Columbia, South Carolina 29211

Re:

Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Power Plant Performance Report

Docket No. 2006-224-E

Dear Mrs. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of August 2010.

Sincerely,

Len S. Anthony (by dhs)

General Counsel

Progress Energy Carolinas, Inc.

LSA/dhs Attachment 45612

c:

John Flitter (ORS)

The following units had no off-line outages during the month of August:

Brunswick Unit 1 Brunswick Unit 2 Harris Unit 1 Robinson Unit 2 Mayo Unit 1 Roxboro Unit 3 Roxboro Unit 4

Full Forced Outage

- A. <u>Duration:</u> The unit was taken out of service at 11:22 on August 13, and was returned to service at 22:53 on August 15, a duration of 59 hours and 31 minutes.
- B. <u>Cause:</u> Leak Associated with Absorber Slurry Tank
- C. <u>Explanation</u>: The unit was taken out of service to investigate and repair a leak in the absorber slurry tank, a component of the flue gas desulfurization system.
- D. <u>Corrective Action:</u> Maintenance activities were conducted to repair and correct the leak in the absorber slurry tank. Upon completion of repairs, the unit was returned to service.

Full Forced Outage

- A. <u>Duration:</u> The unit was taken out of service at 0:24 on August 28, and was returned to service at 16:26 on August 28, a duration of 16 hours and 2 minutes.
- B. Cause: Waterwall Tube Leak
- C. <u>Explanation</u>: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.
- D. <u>Corrective Action:</u> Maintenance activities were conducted to correct the waterwall tube leak. Upon completion of repairs, the unit was available and capable of full-power operation, but remained in reserve shutdown status.

	Month of August 2010		Twelve Month	See Notes*	
MDC	938	MW	950	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	703,754	MWH	6,524,399	MWH	2
Capacity Factor	100.84	%	78.39	%	
Equivalent Availability	99.63	%	78.23	%	
Output Factor	100.84	%	98.69	%	
Heat Rate	10,521	BTU/KWH	10,458	BTU/KWH	
	MWH 	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,382,550	16.61	3
Partial Scheduled	2,567	0.37	85,415	1.03	4
Full Forced	0	0.00	329,895	3.96	5
Partial Forced	0	0.00	94,129	1.13	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	697,872		8,324,920		8

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

^{**} Gross of Power Agency

	Month of August 2010		Twelve Month	See Notes*	
MDC	920	MW	931	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	686,857	MWH	7,774,571	MWH	2
Capacity Factor	100.35	%	95.34	%	
Equivalent Availability	100.00	%	94.65	%	
Output Factor	100.35	%	99.49	%	
Heat Rate	10,787	BTU/KWH	10,618	BTU/KWH	
	MWH 	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	107,101	1.31	3
Partial Scheduled	0	0.00	29,115	0.36	4
Full Forced	0	0.00	232,840	2.85	5
Partial Forced	0	0.00	89,686	1.10	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	684,480		8,155,560		8

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

^{**} Gross of Power Agency

	Month of August 2010		Twelve Month	See Notes*	
MDC	900	MW	912	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	677,639	MWH	7,974,168	MWH	2
Capacity Factor	101.20	%	99.83	%	
Equivalent Availability	100.00	%	98.46	%	
Output Factor	101.20	%	101.17	%	
Heat Rate	10,864	BTU/KWH	10,700	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	9,393	0.12	4
Full Forced	0	0.00	105,870	1.33	5
Partial Forced	0	0.00	11,640	0.15	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	669,600		7,989,120		8

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

^{**} Gross of Power Agency

Progress Ene	ergy Carolinas
Run Date	9/20/2010

BASE LOAD POWER PLANT PERFORMANCE REPORT Robinson 2

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	Month of August 2010		Twelve Month	See Notes*	
MDC	724	MW	731	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	537,121	MWH	4,440,539	MWH	2
Capacity Factor	99.72	%	69.39	%	
Equivalent Availability	100.00	%	67.65	%	
Output Factor	99.72	%	101.53	%	
Heat Rate	11,041	BTU/KWH	10,684	BTU/KWH	
	MWH 	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,644,116	25.69	3
Partial Scheduled	0	0.00	27,365	0.43	4
Full Forced	0	0.00	381,596	5.96	5
Partial Forced	1,535	0.28	32,761	0.51	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	538,656		6,400,640		8

^{*} See 'Notes for Nuclear Units' filed with the January 2010 report.

	Month of August 2010		Twelve Month	Twelve Month Summary		
MDC	727	MW	732	MW	1	
Period Hours	744	HOURS	8,760	HOURS		
Net Generation	417,910	MWH	4,691,615	MWH	2	
Capacity Factor	77.26	%	73.20	%		
Equivalent Availability	95.69	%	94.26	%		
Output Factor	77.26	%	79.24	%		
Heat Rate	10,740	BTU/KWH	10,551	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	268,017	4.18	3	
Partial Scheduled	20,019	3.70	57,534	0.90	4	
Full Forced	0	0.00	5,874	0.09	5	
Partial Forced	3,288	0.61	34,629	0.54	6	
Economic Dispatch	99,670	18.43	1,351,907	21.09	7	
Possible MWH	540,888		6,409,400		8	

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

^{**} Gross of Power Agency

	Month of August 2010		Twelve Month	Twelve Month Summary		
MDC	662	MW	665	MW	1	
Period Hours	744	HOURS	8,760	HOURS		
Net Generation	356,325	MWH	3,802,350	MWH	2	
Capacity Factor	72.35	%	65.28	%		
Equivalent Availability	86.06	%	73.44	%		
Output Factor	82.53	%	86.03	%		
Heat Rate	8,999	BTU/KWH	9,009	BTU/KWH		
	MWH 	% of Possible	MWH 	% of Possible		
Full Scheduled	10,614	2.15	1,193,235	20.48	3	
Partial Scheduled	11,347	2.30	81,843	1.40	4	
Full Forced	39,400	8.00	201,053	3.45	5	
Partial Forced	7,281	1.48	73,646	1.26	6	
Economic Dispatch	67,561	13.72	471,828	8.10	7	
Possible MWH	492,528		5,825,400		8	

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

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BASE LOAD POWER PLANT PERFORMANCE REPORT Roxboro 3

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	Month of August 2010		Twelve Month	See Notes*	
MDC	693	MW	695	MW	1
Period Hours	744	HOURS	8,760	HOURS	
Net Generation	415,373	MWH	4,416,935	MWH	2
Capacity Factor	80.56	%	72.52	%	
Equivalent Availability	99.69	%	94.10	%	
Output Factor	80.56	%	76.47	%	
Heat Rate	10,360	BTU/KWH	10,813	BTU/KWH	
	MWH 	% of Possible	MWH 	% of Possible	
Full Scheduled	0	0.00	314,792	5.17	3
Partial Scheduled	508	0.10	8,925	0.15	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	1,081	0.21	35,418	0.58	6
Economic Dispatch	98,630	19.13	1,314,864	21.59	7
Possible MWH	515,592		6,091,120		8

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

	Month of August 2010		Twelve Month	Twelve Month Summary		
MDC	698	MW	702	MW	1	
Period Hours	744	HOURS	8,760	HOURS		
Net Generation	400,033	MWH	4,697,324	MWH	2	
Capacity Factor	77.03	%	76.36	%		
Equivalent Availability	99.85	%	97.86	%		
Output Factor	77.03	%	77.20	%		
Heat Rate	11,622	BTU/KWH	11,833	BTU/KWH		
	MWH	% of Possible	MWH 	% of Possible		
Full Scheduled	0	0.00	24,920	0.41	3	
Partial Scheduled	0	0.00	66,188	1.08	4	
Full Forced	0	0.00	5,596	0.09	5	
Partial Forced	776	0.15	35,551	0.58	6	
Economic Dispatch	118,503	22.82	1,322,329	21.49	7	
Possible MWH	519,312		6,152,440		8	

^{*} See 'Notes for Fossil Units' filed with the January 2010 report.

^{**} Gross of Power Agency

Plant	Unit	Current MW Rating	January 2009 - December 2009	August 2010	January 2010 - August 2010
Asheville	1	191	70.87	69.97	76.43
Asheville	2	185	59.45	73.13	69.80
Cape Fear	5	144	63.73	78.95	78.72
Cape Fear	6	172	62.21	67.84	73.46
Lee	1	74	50.63	69.58	74.96
Lee	2	77	41.80	61.84	61.87
Lee	3	246	58.82	63.13	74.51
Mayo	1	727	62.45	77.26	78.03
Robinson	1	177	61.18	39.97	70.70
Roxboro	1	369	79.40	90.12	84.23
Roxboro	2	662	73.67	72.35	62.28
Roxboro	3	693	62.76	80.56	82.36
Roxboro	4	698	71.40	77.03	79.52
Sutton	1	97	39.14	54.59	53.75
Sutton	2	104	44.65	63.65	57.75
Sutton	3	403	48.01	64.92	60.82
Weatherspoon	1	48	13.92	56.10	47.85
Weatherspoon	2	48	14.93	56.12	41.97
Weatherspoon	3	75	23.59	63.69	58.06
Fossil System Total		5,190	62.52	72.76	72.94
Brunswick	1	938	97.67	100.84	71.87
Brunswick	2	920	79.50	100.35	96.70
Harris	1	900	93.90	101.20	100.51
Robinson Nuclear	2	724	104.08	99.72	52.97
Nuclear System Total		3,482	93.18	100.57	81.87
Total System		8,672	74.79	83.92	76.55

Amended SC Fuel Rule Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of \geq 92.5% during the 12 month period under review. For the test period March 1, 2010 through August 31, 2010, actual period to date performance is summarized below:

Period to Date: March 1, 2010 to August 31, 2010

Nuclear System Capacity Factor Calculation (Based on net generation)

A Nuclear system actual generation for SCPSC test period	A =	12,089,484 MWH
B. Total number of hours during SCPSC test period	B =	4,415 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW
D. Reasonable nuclear system reductions (see page 2)	D=	3,558,575 MWH
A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B	+ C)]	* 100 = 101.8%

NOTE:

If Line Item E > 92.5%, presumption of utility's minimum cost of operation. If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule Nuclear System Capacity Factor Calculation Reasonable Nuclear System Reductions

Period to Date: March 1, 2010 to August 31, 2010

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	724 MW	3,482 MW
Reasonable refueling outage time (MWH)	1,335,783	0	0	1,644,116	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	92,661	26,110	2,368	364,032	
Reasonable coast down power reductions (MWH)	0	0	0	0	
Reasonable power ascension power reductions (MWH)	55,192	464	0	21,363	
Prudent NRC required testing outages (MWH)	10,237	5,650	599	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	1,493,873	32,224	2,967	2,029,511	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,558,575